

Carex lasiocarpa - *Carex oligosperma* / *Sphagnum* spp. - *Polytrichum* spp.
Herbaceous Vegetation (Northern Sedge Poor Fen)

COMMON NAME	Wiregrass Sedge - Few-seed Sedge / Peatmoss species Herbaceous Vegetation
SYNONYM	Northern Sedge Poor Fen
PHYSIOGNOMIC CLASS	Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (V.A.5.N)
FORMATION	Saturated temperate or subpolar grassland (V.A.5.N.m)
ALLIANCE	CAREX OLIGOSPERMA - CAREX LASIOCARPA SATURATED HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM PALUSTRINE

RANGE

Voyageurs National Park

This community type occurs in and around water tracks of the Rat Root Peatland.

Globally

Isolated stands can occur in central/southern Minnesota, Wisconsin, Michigan, and even northern Iowa and Illinois. This community also is found in Manitoba, Ontario, and possible North Dakota.

ENVIRONMENTAL DESCRIPTION

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The Northern Poor Fen occurs in and around water tracks of large peatlands. In the wetter, more minerotrophic phase, microtopography consists of wet hollows with scattered hummocks. In the drier phase, hummock and hollow microtopography is more well developed. The substrate is deep, fibric *Sphagnum* peat. The water regime is saturated.

Globally

Stands are found in peatlands with low exposure to mineral-rich groundwater, including basin fens, shores above the level of seasonal flooding and larger peatlands. Water hydrology is saturated (Harris *et al.* 1996). The surface water is slightly acidic (pH 4.1-5.9) and nutrient poor [calcium < 13 mg/l] (MN NHP 1993).

MOST ABUNDANT SPECIES

Voyageurs National Park

<u>Stratum</u>	<u>Species</u>
Tall shrub	<i>Larix laricina</i>
Short shrub	<i>Chamaedaphne calyculata</i> , <i>Andromeda polifolia</i>
Graminoid	<i>Carex lasiocarpa</i>
Nonvascular	<i>Sphagnum</i> spp.

Globally

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Short shrub	<i>Chamaedaphne calyculata</i> , <i>Andromeda polifolia</i>
Graminoid	<i>Carex lasiocarpa</i> , <i>Carex oligosperma</i>
Nonvascular	<i>Sphagnum</i> spp.

CHARACTERISTIC SPECIES

Voyageurs National Park

Carex lasiocarpa

Globally

Carex lasiocarpa

VEGETATION DESCRIPTION

Voyageurs National Park

The Northern Poor Fen is dominated by 80-100% cover of *Carex lasiocarpa*. Short, stunted *Larix laricina* trees, usually under 2 m tall, are present above the herbaceous layer at less than 10% cover. Dwarf-shrubs, most commonly *Chamaedaphne calyculata* and *Andromeda polifolia*, may be present at less than 40% cover and, in wetter stands, occupy only the drier hummocks. The dwarf-shrubs *Kalmia polifolia*, *Betula pumila*, and *Vaccinium oxycoccus* may also be present at low density. In addition to *Carex lasiocarpa*, common herbs include *Maianthemum trifolium*, *Menyanthes trifolia*, *Equisetum fluviatile*, *Drosera rotundifolia*, and *Sarracenia purpurea*. Stands of this type that occur in water tracks tend to be more mineral rich and may also contain *Pogonia ophioglossoides*, *Carex livida*, and *Utricularia intermedia*. Sphagnum moss typically forms a continuous carpet, though in wetter stands may be intermixed with brown mosses. The most abundant species are *Sphagnum magellanicum*, *Sphagnum angustifolium*, *Sphagnum subsecundum sensu lato*, and *Warnstorffii exanulata*.

Globally

The vegetation is dominated by graminoids, with up to 25% shrub cover, and scattered trees. The dominant graminoid is *Carex lasiocarpa*, and typical associates include *Carex chordorrhiza*, *Carex limosa*, *Carex oligosperma*, *Rhynchospora alba*, *Scirpus cespitosus*, and *Scheuchzeria palustris*. Forbs include *Sarracenia purpurea*. The low shrub layer contains *Andromeda polifolia*, *Betula pumila*, *Chamaedaphne calyculata*, *Larix laricina*, *Salix discolor*, *Salix pedicellaris*, and *Vaccinium oxycoccus*. The moss layer is virtually continuous, and is dominated by *Sphagnum capillifolium*, *Sphagnum fuscum*, and *Sphagnum magellanicum* (Chapman *et al.* 1989, MN NHP 1993, Harris *et al.* 1996).

CONSERVATION RANK G3G4.

DATABASE CODE Cegl002265

COMMENTS

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Diagnostic features of the type include the continuous cover of *Carex lasiocarpa* and low coverage of *Larix laricina* (less than 25%). Stands that occur in the water tracks are most similar to Ontario's W19 (Harris *et al.* 1996). Those that occur on the margins of water tracks, generally being less mineral rich and having greater cover of tamarack, are floristically most similar to W20.

The wetter phase of this type occurs in the water tracks and often contains standing water in the hollows. The drier phase usually lacks standing water, has greater cover of *Larix laricina* and has a more well developed shrub layer. When cover of *Larix laricina* increases, this community can grade into the Northern Tamarack Poor Swamp. The Northern Tamarack Poor Swamp, however, generally contains a greater cover of *Betula pumila*, is less mineral rich and is drier.

The Wiregrass Sedge Shore Fen is also dominated by *Carex lasiocarpa* but is not found in the Rat Root Peatland and typically lacks *Larix laricina*.

REFERENCES

- Chapman, K. A., D. A. Albert, and G. A. Reese. 1989. Draft descriptions of Michigan's natural community types. Michigan Department of Natural Resources, Lansing, MI. 35 pp.
- Harris, A. G., S. C. McMurray, P. W. C. Uhlig, J. K. Jeglum, R. F. Foster, and G. D. Racey. 1996. Field guide to the wetland ecosystem classification for northwestern Ontario. Ont. Minist. Nat. Resour., Northwest Sci. Tech. Field Guide FG-01. Thunder Bay, Ont. 74 p.
- Minnesota Natural Heritage Program. 1993. Minnesota's native vegetation: A key to natural communities. Ver. 1.5. Minn. Dep. Nat. Resour., Nat. Heritage Prog. St. Paul, Minn. 110 p.